



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/687,895

10/13/2000

Joseph A. Balmas

1162US

8991

7590

01/14/2005

Douglas B Farrow

Graco Minnesota Inc

P O Box 1441

Minneapolis, MN 55440-1441

EXAMINER

VON BUHR, MARIA N

ART UNIT

PAPER NUMBER

2125

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/687,895

Applicant(s)

BALMAS ET AL.

Examiner

Maria N. Von Buhr

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 October 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Examiner acknowledges receipt of Applicant's response to the previous Office action, received 20 September 2004. Claims 1 and 2 remain pending in this application.
2. Applicant's claim for domestic priority under 35 U.S.C. §119(e) is acknowledged, to the extent that the provisional application provides support for the instant claims.
3. The drawings remain objected to under 37 CFR §1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, each of the method steps of the claims, and means/elements for carrying them out, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

In this regard, Applicant argues that "it is submitted that since the specification incorporates by reference the contents of U.S. Patent No. 5,847,285 (including the drawings) that all claimed structure has been included and that Figure 1 in the instant application helps illuminate the improvements of the instant invention, the instant application is in compliance with the C.F.R." This argument is not persuasive, because each of the instantly claimed elements are not evident in the drawings of either the instant application or the referenced document. Particularly, as per claim 1, "said linear relationship having a maximum flow point," "interpolating the desired pressure for said desired flow rate from said linear relationship" and "measuring the flow through said dispensing device during subsequent dispense cycles and adjusting said slope to yield the desired dispense volume" must be shown or the features canceled from the claim. Particularly, as per claim 2, "wherein said linear relationship is divided into at least two segments, the slope of each of said segments being adjusted individually" must be shown or the feature canceled from the claim. No new matter should be entered.

4. Corrected drawing sheets in compliance with 37 §CFR 1.121(d) are required in reply to this Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled

“Replacement Sheet” in the page header (as per 37 CFR §1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by Examiner, Applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The following is a quotation of the first paragraph of 35 U.S.C. §112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 2 is rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In particular, “wherein said linear relationship is divided into at least two segments, the slope of each of said segments being adjusted individually” has not been enabled by the instant specification.

7. In response to Applicant’s argument, the 35 U.S.C. §102(b) rejection of the claims, as being anticipated by Sebens et al. (U.S. Patent No. 4,250,553) is deemed to have been overcome and is, therefore, withdrawn, since Examiner agrees with Applicant’s argument that Sebens et al. do not teach the instantly claimed “measuring the flow through said dispensing device during subsequent dispense cycles and adjusting said slope to yield the desired dispense volume.”

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 1 and 2 are rejected under 35 U.S.C. §102(b) as being clearly anticipated by Bretmersky et al. (U.S. Patent No. 5,687,092; previously cited by Applicant), which disclose a “method of compensating for changes in flow characteristics of a dispensed fluid.”

Bretmersky et al. teach a “fluid dispensing control for controlling the dispensing of a fluid by a metering valve through a nozzle onto a workpiece. An initial value of a flow characteristic of the fluid is determined that is correlated to the relationship between the flow rate of the fluid and nozzle pressure. Desired nozzle pressure values are periodically determined by evaluating a model of flow rate of the fluid

through nozzle in response to the initial value of the flow characteristic and a desired flow rate value. Thereafter, the control provides command signals to the metering valve as a function of the desired nozzle pressures. A new value of the flow characteristic is determined as a function of the measured volume of fluid dispensed during the dispensing cycle to the measured nozzle pressure. During a subsequent dispensing cycle, the control determines the desired nozzle pressures by evaluating the model of flow rate of the fluid through the nozzle as a function of the new value of the flow characteristic. The process of reevaluating the flow characteristic over successive dispensing cycles as a function of measured volumes of fluid dispensed and measured nozzle pressures, and using those updated values to reevaluate the model of flow rate of fluid through the nozzle, is repeated" (see the abstract). Bretmersky et al. teach defining a "second flow characteristic constant N" as the slope of the linear relationship between the flow rate and the pressure of a dispensed fluid (see at least, col. 8, line 25 - col. 9, line 16; col. 10, line 25 - col. 11, line 10). Bretmersky et al. further teach that the constant N (i.e.; the slope of the linear relationship, as instantly claimed) is adjusted in order to achieve a desired volume of dispensed fluid (see at least, col. 15, lines 23-65). See also, claims 1-23 of a continuation patent to Bretmersky et al. (U.S. Patent No. 5,995,909; newly cited).

10. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. Applicant is advised to carefully review the cited art, as evidence of the state of the art, in preparation for responding to this Office action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria N. Von Buhr whose telephone number is 571-272-3755. The examiner can normally be reached on M-F (9am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Maria N. Von Buhr  
Primary Patent Examiner  
Art Unit 2125